

IN THE CLAIMS:

Claims 1 to 51 are cancelled without prejudice.

- 5 52. (newly added) A payment card for conducting a payment transaction between a customer and a merchant comprising:
- 10 a. a substrate;
- b. an alias name printed on the substrate, the alias name being selected by the customer;
- c. a customer-identifier encoded on an encoding medium on the substrate.
53. (newly added) The claim as in 52, comprising: the encoding medium is a magnetic strip.
- 15 54. (newly added) The claim as in 52, comprising: the customer- identifier is self-created by the customer.
55. (newly added) The claim as in 52, comprising:
- 20 the customer-identifier identifies the customer to a payment system, wherein the customer has an account and has pre-stored his/her bankcard data identifying each bankcard with a card specific personal identification number (CPIN).
56. (newly added) The claim as in 55, comprising:
- 25 the payment system assigns an algorithm, the algorithm being used to encrypt the customer-identifier, the encrypted customer-identifier appended with a reference to the algorithm is encoded on the payment card as an encrypted customer-identifier, and the card is physically delivered to the customer.
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57. (newly added) The claim as in 55, comprising:
the customer swipes the card at a merchant Point-Of-Sale (POS) terminal, enters
the CPIN, to effect a payment to the merchant from a bankcard identified by the CPIN.

5 58. (newly added) The claim as in 57, comprising:
the POS terminal transfers the customer-identifier, the CPIN, a merchant
identifier, and a payment amount to a gateway to a bankcard authorization network
(bankcard processor), wherein the bankcard processor interfaces with the payment
system using the customer-identifier and the CPIN

10 59. (newly added) The claim as in 58, comprising:
the payment system uses the customer-identifier to identify customer in the
payment system and with the CPIN retrieves specific bankcard data selected by the
customer and sends it to the bankcard processor.

15 60. (newly added) The claim as in 59, comprising:
the bankcard processor processes the payment transaction between the
customer and the merchant, and sends payment approval data to the merchant POS
terminal.

20 61. (newly added) A merchant point-of-sale terminal comprising:
a wireless point-of-sale (POS) terminal, with a card reader mechanism, a key
pad, a display screen that has a secure wireless connection to a payment system, with
an ability to accept a payment card with a substrate, wherein a customer-identifier is
25 encoded on an encoding medium on the substrate, and wherein the customer-identifier
is used to identify the customer to the payment system, wherein the customer has an
account and has pre-stored his/her bankcard data identifying each bankcard with a card
specific personal identification number (CPIN).

62. (newly added) The claim as in 61, comprising:
the merchant pre-enters merchant identifier, amount to be paid and makes
available to the customer the wireless POS terminal for a payment transaction to the
merchant.

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63 (newly added) The claim as in 61, comprising:
the wireless POS equipped with side shields to provide privacy when entering the
CPIN in the keypad.

10 64. (newly added) The claim as in 61, comprising:
a. the customer enters the payment card in the reader and enters the CPIN;
b. the wireless POS terminal transfers an encrypted payment authorization
record with customer-identifier, CPIN, the merchant identifier, and the amount, to the
payment system.

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65. (newly added) The claim as in 64, comprising:
the payment system decrypts the payment authorization record, and with the
customer-identifier and the CPIN retrieves specific bankcard data selected by the
customer and sends the payment authorization record to a gateway to a bankcard
20 authorization network (bankcard processor).

66. (newly added) The claim as in 65, comprising:
the bankcard processor processes the payment transaction between the
customer and the merchant, and sends payment approval data to the payment system,
25 the payment system forwards it to the wireless POS terminal.

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67. (newly added) A payment system comprising:

- a. a server capable of high volume storage and database searches;
- b. the server maintaining a plurality of accounts each identified with a

customer-identifier and storing at least one bankcard data of the customer and a
5 customer assigned card specific personal identification number (CPIN), enabling a
specific bankcard to be selected by use of the CPIN at a merchant point of sale (POS)
for a payment transaction.

68. (newly added) The claim as in 67, comprising:

10 a payment card encoded with the customer-identifier, the customer swipes the
payment card at a merchant POS, and entering the CPIN to select a specific bankcard
for a payment transaction.

69. (newly added) The claim as in 68, comprising:

15 a bankcard processor receives payment transaction data from the POS terminal,
interfaces with the payment system with the customer-identifier and the CPIN and
retrieves the specific bankcard data intended for the payment transaction.

70. (newly added) The claim as in 69, comprising:

20 the bankcard processor processes payment transaction and sends payment
approval data to the merchant POS terminal.

71. (newly added) A payment transaction method between a customer and a
merchant equipped with a point of sale (POS) terminal for accepting payments
25 comprising the step of:

swiping a payment card at the POS terminal by a customer with the payment
card encoded with a customer-identifier and entering a card specific PIN for selecting a
specific bankcard from a plurality of bankcards of the customer for this payment
30 transaction.

72. (newly added) The claim as in 71, comprising the step of:

receiving payment transaction data from the POS terminal by a bankcard processor, interfacing with a payment system with the customer-identifier and the CPIN
5 and retrieving the bankcard data intended for the payment transaction.

73. (newly added) The claim as in 72 comprising the step of:

processing payment transaction by the bankcard processor and sending
10 payment approval data to the merchant POS terminal.

74. (newly added) A payment transaction method between a customer and a merchant with a web page point-of-sale enabling a secure connection on a global computer network for accepting payments comprising the steps of:

15 a. displaying on the web page fields of, a pre-entered merchant identifier, a pre-entered transaction identifier, a pre entered dollar amount and entry fields of a, name, a card number, and a card expire date;

b. entering of an alias name for name, a customer-identifier for the card
20 number, and for an expiration date enters a card specific PIN to select a specific bankcard from a plurality of bankcards of the customer for this payment transaction; and web page sends the payment data to a bankcard processor.

75. (newly added) The claim as in 74, comprising the step of:

25 receiving payment transaction data from the web page POS by the bankcard processor, interfacing with a payment system with the customer-identifier and the CPIN and retrieving the specific bankcard data intended for the payment transaction.

76. (newly added) The claim as in 75 comprising the step of:
processing payment transaction by the bankcard processor and sending
payment approval data to the merchant and the customer via the global computer
network.

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77. (newly added) A method of selecting any one of a plurality of bankcards of a
customer at a merchant point of sale for a payment to a merchant comprising the steps
of:

- a. entering of a customer identifier and a bankcard specific personal
10 identification number (CPIN) in the point of sale interface;
- b. sending the identifier and the CPIN to a card processor;
- c. interfacing by the card processor with a payment system, wherein the
customer having a plurality of pre-stored customer bankcard data, each bankcard
identified with the CPIN;
- 15 d. returning to the card processor the bankcard data corresponding to the
customer identifier and the CPIN from the payment system.

78. (newly added) The Claim as in 77, having further step of:
identifying a particular bankcard of the customer and verifying the customer by
20 the CPIN.

79. (newly added) The claim as in 77, having further step of:
processing the payment transaction with the bankcard data by the card
processor.

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80. (newly added) The claim as in 78, having further steps of:
a. having access to the payment system by the customer;
b. entering the bankcard data and self-selecting a CPIN for each bankcard of
the customer.

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81. (newly added) A method of secure data storage of a bankcard number comprising the steps of:

5 a. transforming the original bankcard number data string into a transformed data string, the transformed data string having format attributes making it indistinguishable from the original data string, wherein the transforming means include (i) parsing the bankcard number into its parts of bank identification number, card number and expiration date, (ii) having a table A of bank identification numbers and a table B of expiration dates, (iii) looking up the bank identification number location in the
10 table A, applying a random number (RN1) to the location, using the new location looking up a transformed bank identification number, (iv) applying a random number (RN3) to the card number to get transformed card number, (v) looking up the expire date location in the table B, applying a random number (RN2) to the location, using new location looking up a transformed date, (vi) composing a transformed bankcard number made
15 from transformed bank identification number, transformed card number and transformed expiration date;

b. saving the transformed bankcard number and the transform sequence of RN1, RN2, and RN3 in data storage by a reference number.

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82. (newly added) The claim as in 81, comprising the step of: storing the transform sequence in separate data storage means than the transformed bankcard number.

83. (newly added) The claim as in 82, comprising the step of: supplying the
25 reference number, reading the transformed bankcard number and transform sequence, and performing reverse steps to assemble the original bankcard number.